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| 09/734,477      | 12/11/2000  | Donald J. Giroux     | LC-396 US           | 5126             |

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LOCTITE CORPORATION  
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EXAMINER

MAKI, STEVEN D

ART UNIT PAPER NUMBER

1733

DATE MAILED: 10/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/734,477

Applicant(s)

GIROUX ET AL.

Examiner

Steven D. Maki

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 7-2-04 and 10-30-02.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 26-30 is/are allowed.
- 6) ☒ Claim(s) 1-9 and 13-25 is/are rejected.
- 7) ☒ Claim(s) 10-12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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- 1) The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 2) Claim 21 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear what additional limitation of the composition is being claimed.

- 3) Claim 21 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 21 describes the intended use of the composition instead an additional limitation of the composition.
- 4) Claim 12 is objected to because of the following informalities: "A" is not indicated. Appropriate correction is required.

- 5) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

- 6) Claim 22 is rejected under 35 U.S.C. 102(b) as being anticipated by Frankel (US 4237242).

Frankel, directed to a caulking / replacement for solder, discloses a composition comprising:

epoxy resin;

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acrylic resin wherein methyl methacrylate may be used as a co-monomer ("(meth)acrylate component");

metal acetylacetonate for acrylic / epoxy crosslinking ("catalyst comprising transition metal complex");

BF3 amine catalyst for crosslinking the epoxy ("epoxy resin hardener").

See abstract, col. 2 lines 48-66, col. 12 lines 40-50.

The cured composition of claim 22 reads on the cured composition of Frankel. The description of "two component" fails to differentiate the claimed composition from that of Frankel since in order to cure the two component composition, the components must be mixed together. The claimed properties are inherent in Frankel's composition; it being noted that Frankel discloses each component of the claimed first and second components.

7) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8) Claims 1-9 and 13-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leo (WO 95/181183) in view of Corley (US 5137990) and / or Frankel (US 4237242).

Leo discloses a two component composition comprising:

a **first component** containing an epoxy resin, a multifunctional (meth)acrylate ester ("(meth)acrylate component"), a polyurethane poly(meth)acrylate and a **second**

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**component** comprising a hardener component for the epoxy resin wherein the hardener component is a polyamine curing agent. See pages 2 and 3. The composition, which has increased reactivity even at low temperatures, can be used as an adhesive and may be applied at 40-95°F (room temperature). See page 9. Although Leo teaches that the hardener component may also contain an accelerator, Leo does not recite using a catalyst comprising a transition metal complex.

As to claims 1, 21 and 22, it would have been obvious to one of ordinary skill in the art to also include a transition metal complex in Leo's hardener component in view of (1) Leo's teaching that the hardener component of the two component epoxy composition may also contain an accelerator and (2) (a) Corley's teaching that accelerators for accelerating cure of epoxy include a transition metal complex (metal acetylacetonate) and/or (b) Frankel's teaching to use both an amine catalyst and a transition metal complex (metal acetylacetonate) for a composition, which like that of Leo contains an "epoxy resin" and a "(meth)acrylate component", so as to obtain acrylic / epoxy crosslinking *and* epoxy crosslinking. The description of the properties in the preamble and at the last seven lines of claim 1 fails to define a composition different from that suggested by the above applied prior art.

As to the remaining claims: As to claims 2-4 and 19-20, it would have been obvious to use epoxy resin as claimed in view of (1) Leo's teaching to use epoxy resin(s) as described at pages 3 and 4, (2) Leo's teaching to use weight ratios as described at page 8 lines 15-23, and optionally (3) it is taken as well known / conventional per se in the epoxy art to use both bisphenol A-type epoxy resin and

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sorbitol glycidyl ether as "epoxy resin" in an epoxy adhesive. As to claims 5-7, it would have been obvious to use (meth)acrylate component as claimed in view of Leo's disclosure regarding (meth)acrylate ester at pages 4-7. As to claims 8-9, it would have been obvious to use filler as claimed since (1) Leo teaches that the composition may contain filler (page 8) and (2) silica is taken as a well known / conventional filler for an epoxy adhesive. As to claims 13-15, the claimed transition metal complex is suggested by Corley / Frankel. As to claims 16-18, it would have been obvious to use accelerator as claimed in view of (1) Leo / Corley's teaching to include accelerator in the composition and optionally (2) it is taken as well known / conventional per se to use more than one accelerator in an epoxy adhesive. As to claims 23-25, it would have been obvious to bond substrates together as claimed using Leo's composition as modified by the secondary art since (1) Leo teaches using the composition as an **adhesive** and (2) it is taken as well known / conventional per se in the bonding art to implement use of an adhesive by (a) applying adhesive to one of the substrates and, with or without allowing partial cure, mating the substrate with another substrate or (b) injecting the adhesive between the substrates.

#### Allowable Subject Matter

9) Claim 10 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Although the specific adhesion promoter is known per se as evidenced by WO 00/40663, there is no motivation to further modify Leo so as to include the specific adhesion promoter of claim 10.

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As to claims 11-12 and 26-30: Claims 26-30 are allowed. Claims 11-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Although polyether amine based hardeners for epoxy resin are known per se as evidenced by Schuft, there is no motivation to further modify Leo so as to use a polyether amine based hardener instead of the aliphatic polyamines or amidoamines described by Leo at pages 7 and 8.

## Remarks


10) Applicant's arguments with respect to claims 1-9 and 13-25 have been considered but are moot in view of the new ground(s) of rejection.

11) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Maki whose telephone number is (571) 272-1221. The examiner can normally be reached on Mon. - Fri. 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571) 272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Steven D. Maki  
October 4, 2004

  
STEVEN D. MAKI  
PRIMARY EXAMINER  
~~GROUP 1300~~  
AV 1733  
10-4-04